

Abstract for AMIA Theater Style Demonstration of the Composite Health Care System II The Military Health System Computer-Based Patient Record

The Composite Health Care System II (CHCS II) is the Military's electronic Computer-based Patient Record, a clinical information system that will generate, maintain, and provide secure online access to a comprehensive and legible health record. In moving to CHCS II, the Department of Defense (DoD) is making the quantum leap from paper based medical records to computer based patient record (CPR). The CPR will enable DoD health care to meet its strategic goals for the 21st century and is paramount to providing comprehensive patient-focused information. When CHCS II is fully deployed the outpatient load alone will exceed 50 million encounters a year. Key CHCS II program priorities include Force Health Protection and Population Health Improvement (moving from intervention services to primary prevention of illnesses and injuries), deployability, surveillance, and efficiency in access and delivery of health care. CHCS II provides three fundamental capabilities:

- *A seamlessly integrated clinical graphical user interface (GUI)* for documenting patient care by health care professionals at the point of care and for displaying data that may have been derived from diverse external sources [labs, radiology, pathology, wellness alerts]. From the battlefield back to the large tertiary care hospitals and all locations in between, the interface to the military CPR will be the same.
- *An enterprise-wide, industry standards-based Clinical Data Repository (CDR)* of DoD beneficiary's life-long medical information. This is the core of the DoD CPR. A true central database, this will allow mining of data for wellness alerts, symptom surveillance, clinical research, and population health improvement.
- *Migration Architecture.* The integrated clinical GUI will remain the same, but the underlying code base "behind the screens" will be exchanged for newer more robust and maintainable products as they become available.

CHCS II Release 1 provides immediate, concurrent availability to legible health care patient records, 24 hours a day, 7 days a week. This improved access to critical patient-based healthcare information and access to population data via automated queries will help prevent redundant or harmful health care delivery. Furthermore, it will support collaborative care by tracking all health care activity even within the same day. All data is documented electronically using a workstation, from the point of check-in to the completion of the health care encounter. CHCS II also has a "Theater" (deployed, combat-oriented) configuration that utilizes an Interim Data Base (ITDB) to store medical data. The ITDB can be as small as a laptop or as large as a regional server depending on need in the theater location.

The theater style demonstration will provide an overview of CHCS II and will show actual screens, depicting the work flow of a notional patient encounter to fully explain the application.

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